Title (en)

EFFICIENT IMPLEMENTATION OF OPTIMIZED HOST-BASED GARBAGE COLLECTION STRATEGIES USING XCOPY AND MULTIPLE LOGICAL STRIPES

Title (de)

EFFIZIENTE IMPLEMENTIERUNG VON OPTIMIERTEN HOSTBASIERTER MÜLLSAMMLUNGSSTRATEGIEN UNTER VERWENDUNG VON XCOPY UND MEHREREN LOGIKSTREIFEN

Title (fr)

IMPLÉMENTATION EFFICACE DE STRATÉGIES DE RÉCUPÉRATION D'ESPACE MÉMOIRE À BASE D'HÔTE OPTIMISÉ UTILISANT DES XCOPY ET DES BANDES LOGIQUES MULTIPLES

Publication

EP 3384394 B1 20210421 (EN)

Application

EP 16823467 A 20161220

Priority
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- US 2016067726 W 20161220

Abstract (en)

[origin: US2017242790A1] Systems, methods and/or devices are used for efficient implementation of optimized host-based garbage collection strategies using xcopy and arrays of flash devices. In one aspect, a method of managing a storage system having one or more storage devices includes a host-based garbage collection operation that includes identifying two or more logical stripes in accordance with data storage information stored at the host system, and enabling a process of coalescing valid data in the two or more logical stripes. Further, the use of an internal copy operation (e.g., xcopy), allows the host-based garbage collection operation to occur without transferring data back to the host, thus minimizing the number of I/O operations between the host and storage devices. Additionally, use of the host-based garbage collection operation allows more sophisticated garbage collection algorithms (e.g., matching the current workload) to be used, and ensures that multiple logical stripes are available to write data.

IPC 8 full level

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CPC (source: EP US)

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